



ARL(SLAD) Develops New Web Site: NBCCS On-line Handbook

by Timothy Mallory, Army Research Laboratory, Survivability/Lethality Analysis Directorate

Vision. The U.S. Army Research Laboratory (ARL), Survivability/Lethality Analysis Directorate (SLAD) has developed a new Web site for program managers (PMs), combat developers (CBTDEV) and materiel developers (MATDEV) specifically pertaining to nuclear, biological, and chemical contamination survivability (NBCCS). This on-line electronic handbook organizes and centralizes most of the known works in NBCCS, thereby making that information readily available to better enable programs to meet survivability requirements. This article provides a brief discussion of the various features and information contained on the Web site.

Initiative. Construction of the Web site was suggested at the March 2001 meeting of the Nuclear and Chemical Survivability Committee Secretariat (NCSCS) to improve the defense acquisition community's awareness and understanding of NBCCS. Mr. Drew Farenwald, Chief of the Nuclear, Biological and Chemical (NBC) Effects Branch, volunteered the resources of ARL(SLAD) to construct and publish the Web site. The NBCCS On-line Handbook homepage is presented in Figure 1.

The Web site design enables quick and easy access to various publications, handbooks, and technical reports pertaining to NBCCS. Let's introduce the Web site's layout and features to see how useful the information is, and how it can assist you.

As illustrated in Figure 1, navigation buttons enable easy retrieval of the content. A brief discussion of each of these navigation buttons is located in the following pages.

Policy/Regulations. Policy and guidance for survivability and NBCCS are contained in Department of Defense (DOD) Directive (5000.1) and DOD Instruction (5000.2), and U.S. Army Regulation 70-75. Although these mandate general requirements in meeting NBC survivability, specific guidelines pertaining to NBCCS are given in the Quadrupartite Standardization Agreement 747, as adopted by the armies of the U.S., U.K., Canada and Australia. In addition, the Deputy Chief of Staff for Operations and Plans (DCSOPS) issued quantitative NBCCS criteria for U.S. Army materiel, which consists of three characteristics: hardness,



Figure 1. Homepage of the NBCCS On-line Handbook.

compatibility, and decontaminability. The aim in producing systems with NBCCS characteristics is to ensure that there is no significant degradation [hardness] of the equipment's critical functions, and to enable its crew to complete the assigned mission [compatibility]. A contaminated system and its crew can result in a permanent loss of mission, or may be unavailable for combat until a decontamination procedure is performed to a safe level [decontaminability] that precludes crew casualties. Reinforcement of this policy by the DCSOPS was recently issued in a November 2000 memorandum, requiring PMs, CBTDEVs, and MATDEVs to implement a rigorous approach to attain NBCCS.

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Address:

<https://www-slاد.arl.army.mil/Internal/NBCCS/home.html>

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The **Chemical and Biological Defense Information Analysis Center (CBIAC)** is a Department of Defense (DoD)-sponsored Information Analysis Center (IAC) operated by Battelle Memorial Institute and administered by the Defense Information Systems Agency (DISA), Defense Technical Information Center (DTIC) under the DoD IAC Program Office (Contract No. SPO700-00-D-3180). The CBIAC is supported by Horne Engineering Services, Inc., Innovative Emergency Management, Inc., MTS Technologies, Inc., QuickSilver Analytics, Inc., and SciTech, Inc. Contact the CBIAC Contracting Officer's Technical Representative (COTR) at:

CDR USA SBCCOM
Edgewood Chemical Biological Center
ATTN: AMSSB-RRT-OM (CBIAC COTR)
5183 Blackhawk Road
Aberdeen Proving Ground, MD 21010-5424

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The CBIAC is located in Building E3330, Room 150, Aberdeen Proving Ground - Edgewood Area, Maryland 21010. For further information or assistance, visit or contact the CBIAC.

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The CBIAC Newsletter, a quarterly publication of the CBIAC, is a public release, unlimited distribution forum for chemical and biological defense information. It is distributed in hardcopy format and posted in Portable Document Format (PDF) on the CBIAC Homepage.

The CBIAC welcomes unsolicited articles on topics that fall within its mission scope. All articles submitted for publication consideration must be cleared for public release prior to submission. The CBIAC reserves the right to reject or edit submissions. For each issue, articles must be received by the following dates: Winter (First Quarter) - November 1st; Spring (Second Quarter) - February 1st; Summer (Third Quarter) - May 1st; Fall (Fourth Quarter) - August 1st.

All paid advertisements and articles are subject to the review and approval of the CBIAC COTR prior to publication. The appearance of an advertisement or article in the *CBIAC Newsletter* does not constitute endorsement by the DoD or the CBIAC.

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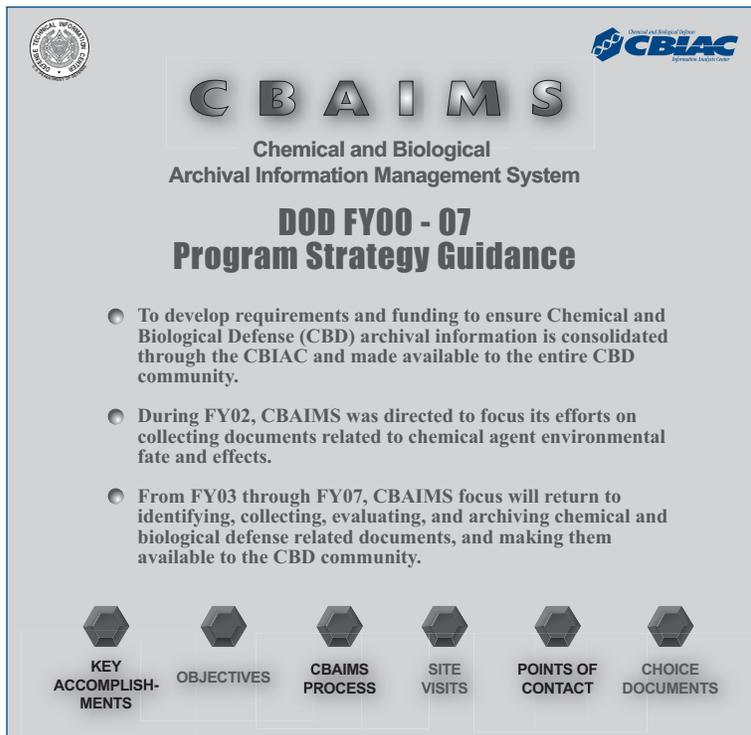
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Current Awareness & Promotions; Newsletter Editor

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The Chemical and Biological Archival Information Management System (CBAIMS)

CBIAC TAT 90:

The Chemical and Biological Archival Information Management System (CBAIMS) is a program sponsored by the Defense Threat Reduction Agency (DTRA). The objective of CBAIMS is to consolidate Chemical and Biological Defense (CBD) archival information into a single database and make it available by means of a virtual repository. This database and repository will be available for the entire CBD community to use. During the Fiscal Year 2002, CBAIMS was directed to focus its efforts on collecting documents related to the environmental fate and effects of chemical agents. From October 2002 through September 2007, the focus of the CBAIMS program will return to identifying, collecting, evaluating, and archiving chemical and biological defense related documents.



The graphic features the CBIAC logo at the top right and the Department of Defense seal at the top left. The central text reads "CBAIMS Chemical and Biological Archival Information Management System" and "DOD FY00 - 07 Program Strategy Guidance". Below this, three bullet points describe the program's focus: consolidating CBD archival information, collecting documents on environmental fate and effects, and returning to identifying and archiving defense-related documents. At the bottom, six hexagonal icons represent key areas: Key Accomplishments, Objectives, CBAIMS Process, Site Visits, Points of Contact, and Choice Documents.

In the Chemical Biological Defense Program portion of the FY04-09 POM Program Guidance dated 10 Apr 02, paragraph 6.7 contains the following guidance: "CBAIMS (Chemical/Biological Archival Information Management System) is a program designed to respond to the DoD Program Strategy Guidance, which dictated the development and funding to ensure CBD archival information is consolidated and made available to the entire CBD community. The intent of the CBAIMS program is to provide a one-stop integrated

database system. Emphasis in CBAIMS focus was redirected to address Agent Operational Effects Data Compilation and Evaluation project. The data on agent fate may not address the full-spectrum of the agent threat. CB Agent Fate Project work is scheduled for completion by May 2004. CDBP POM Guidance is to complete this effort by December 2002 on an accelerated program. The deliverable will be a comprehensive electronic database and PDF-format for copies of relevant documents. CBIAC will retain copies of all documents (in hard copy and/or electronic form) as part of the general CBIAC collection. Documents acquired from foreign sources will be retained in a separate collection and not distributed except as provided for by the appropriate foreign POC or other cognizant authority. The CDBP is to provide an investment strategy to accelerate the Agent Operational Effects Data Compilation and Evaluation for completion by December 2002 and the completion of CBD archival information capture and digitalization by September 2007 in the FY 04-09 POM build."

Objectives of the CBAIMS Program

Based on this guidance from the Department of Defense, the following objectives for the CBAIMS program were developed and approved by the CBIAC Executive Steering Committee and the CBAIMS Advisory Committee.

- Provide real-time support to the warfighter
- Provide information and support to the CBD community
 - Consolidate CBD archival information
 - Improve delivery of mission critical information products and services at lower cost
 - Improve CBD materiel acquisition programs and reduce programmatic risk
 - Reduce Operations & Maintenance costs
 - Minimize data duplication
- Contact other government agencies
 - Develop interest in CBAIMS data collection and preservation
 - Characterize their collections
 - Integrate their collections into CBIAC
 - Include international collections
- Provide technical support to Department of Defense and the military services via DTRA, OSD, and their co-sponsors.
- Provide one-stop access for Freedom of Information Act and Congressional requests for CBD information

Continued pg. 9

Address:

<http://ss-cbiac.apgea.army.mil/resources/cbaims/cbaims.html>

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CONTRACT AWARDS • by Mary Frances Tracy

C2A1 Canisters

Canadian Commercial Corporation
Ottawa, Ontario, Canada K1A 086
\$126,777. July 18, 2002

By U.S. Army Tank-Automotive & Armaments Command,
Rock Island, IL

M93/M93A1 Fox Contractor Logistics Support

General Dynamics Land Systems Inc.
Sterling Heights, MI 48310-3268
\$2,027,133. July 18, 2002

By U.S. Army Tank-Automotive & Armaments Command,
Rock Island, IL

Chemical and Biological Studies and Analysis

Bechtel National Inc.
San Francisco, CA 94105-1813
\$1,335,000. July 30, 2002

By Headquarters, Operational Support Command,
Rock Island, IL

M40 Mask C2A1 Canisters

Canadian Commercial Corporation
Ottawa, Ontario, Canada K1A 086
\$1,200,628. July 31, 2002

By U.S. Army Tank-Automotive & Armaments Command,
Rock Island, IL

Medical Defenses Against Anthrax

Advanced Biosystems
Manassas, VA 20110
\$3,000,000. August 1, 2002

By Defense Advanced Research Projects Agency,
Arlington, VA

M42 Chemical Alarm Units (3,000 units)

Mathews Associates Inc.
Sanford, FL 32771
\$748,380. August 6, 2002

By U.S. Army Tank-Automotive & Armaments Command,
Rock Island, IL

Flexible Chemical and Biological Agent Resistant Nanocomposite Materials for Mask Hood, Lenses and Components

Triton Systems Inc.
Chelmsford, MA 01824
\$749,975. August 30, 2002

By U.S. Air Force Materiel Command,
Wright-Patterson AFB, OH

Joint Services and Air Force Chemical and Biological Warfare Defense Science and Technology to Provide an Effective Defense Against Any Adversary Employing Weapons of Mass Destruction

Simulation Technologies Incorporated
Beavercreek, OH
\$75,000. September 6, 2002

By Air Force Research Laboratory,
Wright-Patterson Air Force Base, OH

17 Joint Biological Point Detection Systems, 53 Biological Agent Warning Sensors, and Spares, Repairs and Logistics Support

Technical Products Group Inc.
Deland, FL
\$11,700,000. September 9, 2002

By U.S. Army Robert Morris Acquisition Center,
Aberdeen Proving Ground, MD

Arms Control Nonproliferation Chemical and Biological Defense Contracts

Science Applications International
San Diego, CA 92121
Applied Research Associates, Inc.
Albuquerque, NM 87110

ITT Research Institute
Chicago, IL 60616
\$689,800,000. September 9, 2002

By Defense Threat Reduction Agency,
Fort Belvoir, VA

39,000 Chemical and Biological Mask Face Pieces, 15,000 Chemical and Biological Mask Kits, Conversion of 71,000 Face Pieces into Chemical and Biological Mask Kits, and 32,526 Chemical and Biological Mask Kits

Mine Safety Appliances
Murrysville, PA 15320
\$9,294,350. September 10, 2002

By Headquarters Warner Robins Air Logistics Center,
Robins Air Force Base, GA

Improved Chemical Agent Monitors

Technical Products Group Inc.
Deland, FL
\$6,323,572. September 18, 2002

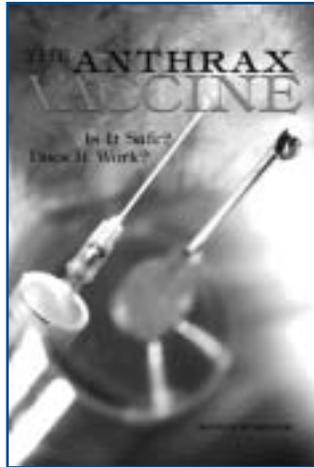
By U.S. Army Robert Morris Acquisition Center,
Aberdeen Proving Ground, MD

New CBIAC Information Resources • By Richard M. Gilman

Books

Joellenbeck, Lois M., eds. **The Anthrax Vaccine: Is It Safe? Does It Work?** Washington, D.C.: National Academy Press, 2002.

"Anthrax Vaccine Absorbed (AVA) was licensed in 1970 to provide protection against infection with *Bacillus anthracis*. AVA was initially administered on a limited basis, primarily to protect veterinarians and workers processing animal products such as hair or hides that could be contaminated with anthrax spores. In the 1990s, with growing concerns about the possible use of anthrax as a biological weapon, use of the vaccine was substantially expanded. The Department of Defense (DOD) vaccinated some of the military personnel deployed for the Gulf War in 1991 and in 1998 initiated the Anthrax Vaccine Immunization Program, calling for mandatory vaccination of all U.S. service members. By late 2001, roughly 2.1 million doses of AVA had been administered. Production of AVA was suspended in 1998 when the facility manufacturing the vaccine was closed for renovations, which were undertaken to meet regulatory requirements of the Food and Drug Administration (FDA).



Concerns about the efficacy and safety of AVA, and about vaccine production, led Congress to direct the DOD to support an independent examination of AVA by the Institute of Medicine. In October 2000, the Institute of Medicine convened the Committee to Assess the Safety and Efficacy of the Anthrax Vaccine. The committee reviewed all available data, both published and unpublished, and heard from representatives of DOD, FDA, and other Federal agencies; from the vaccine manufacturer Bioport; from researchers studying the efficacy and safety of the vaccine; and from service members and others with concerns about the safety or efficacy of the vaccine. After the bioterrorism of fall 2001, the committee accelerated its original timetable for its review." (from the Executive Summary, Abstract)

Includes numerous tables, illustrations and eight appendices.

Full text can be reviewed online at the website of the National Academy Press reading room located at <http://www.nap.edu>.

CB-160652 • ISBN 0-309-08309-5 National Academy Press
Box 285, 2101 Constitution Ave., N.W.
Washington, D.C. 20055
Phone: 1-800-624-6242 or 202-334-3313

Journals

Gardner, Patrick J. **Chemical and Biological Sensing.** Proceedings of the International Society of Optical Engineering. Vol. 4036 (July 2000).

The papers published in this volume were delivered at the SPIE (The International Society for Optical Engineering) conference in Orlando Florida on April 24-25, 2000. The chapter length presentations cover such topics as testing procedures for standoff chemical and biological detection systems, temperature sensitivity of biological warfare agent simulants, rapid detection and classification of aerosol events utilizing changes in particle size distribution, a growth medium for the rapid identification of anthrax, photoelectric biological and chemical sensors, detection of volatile compounds produced by micro-organisms utilizing infrared spectrophotometry, chemical and biological sensing with a miniature mass spectrometer, WILDCAT, a long range, laser standoff detector of chemical agent vapors and aerosol clouds, SR-BSDS, a short-range, biological standoff detection system, and the use of tunable ultraviolet lidar for modeling of standoff biodetectors.

CB-160695 • ISBN 0-8194-3662-3 SPIE
P.O. Box 10 • Bellingham, WA 98227
Phone: (360) 676-3290 • Fax: (360) 647-1445
<http://spie.org>

Documents from the Web

Borio, Luciana *et al.* **Hemorrhagic Fever Viruses as Biological Weapons—Medical and Public Health Management.** JAMA—Journal of the American Medical Association. Vol. 287, No.18 (May 8, 2002).
<http://jama.ama-assn.org/issues/v287n18/fpdf/jst20006.pdf>

"The consequences of an unannounced aerosol attack with an HFV are the primary focus of this analysis. A variety of attack scenarios with these agents are possible. This analysis does not attempt to forecast the most likely but focuses on perhaps the most serious scenario. Understanding and planning for a covert aerosol attack with HFV's will improve preparedness for other scenarios as well." (*Introductory Remarks*)

CB-160816 JAMA • American Medical Association
P.O. Box 10946 • Chicago, IL 60610-2350
Phone: (800) 262-2350 • Fax: (312) 464-5831

National Institute of Justice. **Chemical Facility Vulnerability Assessment Methodology.** Special Report. Washington, D.C.: National Institute of Justice, U.S Department of Justice, 2002.
<http://www.ncjrs.org/pdffiles1/nij/195171.pdf>

"This special report presents a prototype vulnerability assessment methodology developed for chemical facilities to use to identify

CALENDAR OF EVENTS

The CBIAC highlights conferences, symposia, meetings, exhibitions and workshops of interest to the CBD community both on our website and in every issue of our newsletter. If you would like to have a CBD-related event posted on the CBIAC Calendar of Events, submit the pertinent information via email to cbiac@battelle.org. Due to space limitations, the CBIAC will accept submissions on a first-come, first-served basis and reserves the right to reject submissions. For a more extensive list of events, [visit our website at http://www.cbicac.apgea.army.mil/](http://www.cbicac.apgea.army.mil/).

November 12, 2002

IAC Awareness Conference - DoD IACs: The Homeland Security Community's Information Edge

Cheyenne Mountain Resort, Colorado Springs, CO

POC: Tim Dixon

dixon@battelle.org

Phone: 410.569.0200 • Fax: 410.569.0588

http://www.cbicac.apgea.army.mil/iac_conference/iac_aware.html

November 19-21, 2002

The Scientific Conference on CB Defense Research

Marriotts Hunt Valley Inn

Hunt Valley, MD

POC: SBCCOM/ECBC (Technical Information)

Phone: 410.436.4883

POC: Battelle Edgewood Operations (Registration Information)

Phone: 443.569.0200 x3022 Fax: 410.569.0588

cbdefense@battelle.org

www.cbdefense.com

November 30-December 6, 2002

COURSE: Medical Management of Chemical and Biological Casualties (MCBC)

#6H-F26 (Advance registration required)

USAMRICD, APG, MD and

USAMRIID, Ft. Detrick, MD

POC: Chemical Casualty Care Division, USAMRICD

Phone: 410.436.2230 DSN 584.2230

Fax: 410.436.3086 DSN 584.3086

ccc@apg.amedd.army.mil

<http://ccc.apgea.army.mil/>

December 2-4, 2002

2002 CBRN Defense Conference

Tampa Marriott Westshore

Tampa, FL

Phone: 813.828.2174 DSN: 299.2174

http://www.geocities.com/onecelledcreature/SOF_NBC_Conference.html

December 2-5, 2002

I/TEC The Power of Simulation: Transforming our World

Orlando, FL

<http://www.iitsec.org>

December 2-5, 2002

23rd Army Science Conference

Renaissance Orlando Resort, Orlando, FL

Phone: 757.357.4011 Fax: 757.357-5108

asc2002info@aol.com

<http://www.asc2002.com>

December 2-6, 2002

Singapore International Symposium on Protection Against Toxic Substances (SISPAT)

Sheraton Towers

Singapore

<http://www.dso.org.sg/sispat>

December 2-6, 2002

HazMat Explo 6

The Orleans Hotel & Casino

Las Vegas, Nevada

Phone: 702.455.5710

<http://hazmatexplo.org>

December 5-6, 2002

2nd International Conference on Detection Technologies: The Next Generation in Identification and Analysis

Marriott Crystal Gateway

Arlington, VA

POC: The Knowledge Foundation

Phone: 617.232.7400 Fax: 617.232.9171

custserv@knowledgefoundation.com

<http://www.knowledgepress.com/events/7191716.htm>

December 8-12, 2002

The 2002 EPA Region III Chemical Emergency Preparedness and Prevention Conference

Baltimore, MD

POC: General Physics Corporation

kharris@genphysics.com

<http://www.2002conference.org>

December 9-12, 2002

5th International Military Sensing Symposium: "Military Sensing Challenges in Asymmetric Warfare-New Technologies in the Fight Against Terrorism"

National Institute of Standards and Technology

Gaithersburg, MD

POC: IRIA Center, Veridian Systems Division, Inc.

Phone: 734.994.1200 ext. 2821/2881 Fax: 734.994.5550

mss@veridian.com

<http://www.iriacenter.org>

<http://www.iriacenter.org/irismet.nsf/International?OpenPage>

2003 MEETINGS

February 1-5, 2003

2003 Miami Nature Biotechnology Winter Symposium

Radisson Deauville Resort

Miami, FL

Phone: 423.253.3876

sblack@miami.edu

<http://www.med.miami.edu/mnbws>

IN THE NEWS • By Mary Frances Tracy

Regional center to fight biologic threats • Holly Korschun
Emory Report August 5, 2002
 "Leading research institutions and public health programs throughout the Southeast [U.S.] are joining forces in the new Southeastern Center for Emerging Biologic Threats (SECEBT), ..."
http://www.emory.edu/EMORY_REPORT/erarchive/2002/August/erAug.26/8_26_02center.html

Ready for the worst: Airmen train to deal with catastrophes • Pfc. James Ramirez.
Fort Leonard Wood Guidon August 22, 2002
 Fort Leonard Wood is training student airmen, " '...to handle major accidents, natural disasters, and nuclear, biological and chemical attacks, to include weapons of mass destruction... ' "
 " All of the classes lead up to five days of field training at the Chemical Defense Training Facility where the airmen are subjected to a highly stressful environment, simulating worst case scenarios in the real world.
<http://www.flwguidon.com/archives/index.inn?loc=detail&doc=/2002/August/22-1524-News-05.txt>

Fort Lee SRT trains for real-life threats • Spc. Jorge Gomez.
Fort Lee Public Affairs Office August 22, 2002
 Members of the Special Reaction Team (SRT) of Ft. Lee are regular military police who volunteer to be part of this anonymous and highly proficient task force in order to be prepared for real-life threats. Members go through a rigorous selection process that involves days of training and testing in order to be prepared for real-life threats like hostage takeovers, terrorism operations or barricaded suspects. The training additionally prepares the members to interact with the Criminal Investigations Department who are the hostage negotiators.

Enzyme Detects, Destroys Anthrax; Fast-Track Testing Approved by FDA • David Perlman
The San Francisco Chronicle August 22, 2002
 Vincent Fischetti of the Rockefeller University in New York, and his research team are reporting a newly discovered enzyme that could safely treat victims of a bioterrorist anthrax attack as well as swiftly detect suspected anthrax spores wherever they might be hidden. Fischetti's group is publishing a report on the enzyme's early tests in the British scientific journal Nature.
<http://sfgate.com/cgi-bin/article.cgi?f=/c/a/2002/08/22/MN71918.DTL>

AFIP Scientists Perform 10,000 Tests to Help Stem Anthrax Crisis • Christopher C. Kelly
American Forces Press Service August 27, 2002
 When the U.S. faced uncertain use of anthrax as a weapon in the fall of 2001, the Department of Defense (DoD) routed requests for help from the Centers for Disease Control and

Prevention (CDC) to the Armed Forces Institute of Pathology (AFIP), a member of the CDC Laboratory Response Network. In response to the request, a team of six scientists was deployed to CDC's Atlanta headquarters to conduct tests shortly after the first attacks. In the days that followed, scientists of AFIP's Biosafety Level 3 lab began a weeks-long operation to identify suspected anthrax samples submitted from metropolitan Washington. "AFIP scientists and support personnel expertly diagnosed over 5,000 environmental and clinical samples of suspected anthrax. The AFIP team performed over 10,000 tests on the samples and confirmed the presence of anthrax in 62 cases."
http://www.defenselink.mil/news/Aug2002/n08272002_200208275.html

DoD Announces Biological Defense Homeland Security Initiative
NEWS RELEASE from the United States Department of Defense August 27, 2002
 "The Department of Defense announced today that the deputy assistant to the secretary of defense for chemical and biological defense is initiating a new program to support homeland security called the Biological Defense Homeland Security Support Program. The purpose of the program is to achieve early detection and characterization of a biological-related incident in an urban area in order to reduce casualties, minimize disruption to infrastructures and support consequence management efforts."
http://www.defenselink.mil/news/Aug2002/b08272002_bt444-02.html

DoD To Develop Biological Agent Early Warning System • Gerry J. Gilmore
American Forces Press Service August 27, 2002
 DoD will start work this fall on a biological agent detection and identification program as part of efforts to develop a national early warning system for urban areas. Dr. Anna Johnson-Winegar, deputy assistant secretary of defense for chemical and biological defense programs, explained that the DoD Biological Defense Homeland Security Support Program seeks to expand and augment pilot programs in Washington, D.C., and other locations. She further explained the need to be able to determine more rapidly potential attacks involving biological weapons and agents in the atmosphere. The commencement of the program this fall will be at locations throughout metropolitan Washington and at Kirtland Air Force Base, Albuquerque, NM. More than \$400 million has been allocated for the program in fiscal 2003 according to Dr. Johnson-Winegar.
http://www.defenselink.mil/news/Aug2002/n08272002_200208274.html

“NBCCS...” *cont.*

Handbooks. In preparing an NBCCS program plan, you are encouraged to review the Web site's on-line handbook publications. Publications provided are the Materials Handbook, the NBC Survivability Handbook, and several military handbooks. Through familiarization with these handbooks, the goal is to establish the technical infrastructure of corporate understanding, commitment, and direction so that a comprehensive NBCCS program can be implemented. These handbooks contain examples of past experience involving field investigations and analyzing testing results. You should find these sources very useful in tailoring to your programs and in performing NBCCS evaluations of both fielded and developmental systems.

Presentations & Symposiums. In the early '90s, NBCCS symposiums were held amongst government, industry, and academia in the chemical/biological defense community and DOD components. The participants displayed a proactive approach in achieving NBCCS objectives and shared their progress in the design and testing of military components and materials. Users may be interested in the NBCCS information presented on several particular DOD programs. There are also briefings on policy, methodology, modeling and simulation, and laboratory results. This section also includes a slideshow entitled “A General Overview of NBCCS,” which provides a basic understanding of NBCCS, presents examples, and explains its importance.

Technical Reports. The Web site has compiled a collection of technical reports of NBCCS assessments for various combat systems. Reports include the following: Avenger, Black Hawk, Crusader, Javelin, Kiowa Warrior, Longbow Apache, Paladin, Patriot, AGS, AMPS, HE-WAM, MICAD, and SINCGARS. The Bibliographic Summary, contained in the Help section, lists these technical reports along with their abstracts and ordering information. Also, several technical reports are provided in electronic format and can be viewed on-line or downloaded from the Web site.

Journal/Magazine Articles. Numerous journal and magazine articles have been published discussing the goals and objectives of an NBCCS program. Many of the articles that were published emphasize the importance in conducting an NBCCS program. The Web site contains several articles that were released by the Government to the general public to introduce NBCCS and explain the importance of why starting NBCCS early in the acquisition life cycle will yield cost savings and combat dividends vs. ignoring or addressing it later. With this objective in mind, the attention to NBCCS by DOD contractors and those in academia and industry indicates that the NBC threat is serious and that with the proper technical guidance in design and manufacture of materiel, NBCCS is achievable. Due to changes in organizations, policies, and regulations, their content takes on an historical perspective. The on-line articles should provide you with a general philosophical understanding to implement a

successful NBCCS program.

Analysis/Results. The Web site has also compiled a collection of analysis reports of laboratory studies. Reports include immersion and permeation testing of polymers, absorption, desorption and permeation tests of materials, and modeling for predicting degradation of mechanical properties of materials. The Bibliographic Summary, contained in the Help section, also lists these analysis reports along with their abstracts and ordering information. A few analysis reports are provided in electronic format and can be viewed on-line or downloaded from the Web site.

Help. This section of the Web site provides quick reference materials for locating publications, performing general inquiries, requesting test data and analyses, and reviewing NBCCS requirements statements used in operational requirements documents, test and evaluation master plans, and system specifications. A guidebook, prepared by the U.S. Army Nuclear and Chemical Agency (USANCA), lists who to contact and the location of testing facilities. You should find this information helpful in determining the best practices and approaches to use in preparing NBCCS program plans.

Links. Several hypertext “hotlinks” are provided that identify the primary technical expertise and programmatic support needed by PMs and other government agencies performing an NBCCS program. Links to external Web sites provide other useful information pertaining to chemical/biological defense training, doctrine, and equipment. Although the listing focuses on a few select areas, other DOD contractors and installations should also be explored. You should consult these Web sites to inquire of their particular technical product or service. Your involvement with these key resources is encouraged to meet current and future military procurement activities.

Contacts. The NCSCS is the primary focal point for NBCCS. Representatives from other government agencies participate in regular meetings. You are encouraged to plan to attend NCSCS meetings in conjunction with the milestone decision review process. A contacts list of ARL(SLAD) mission area managers is available to assist you during your review. Mission areas are established for ground, air and missile defense, aviation, munitions, and C4I systems. Each of these areas has an NBCCS subject matter expert available to support ongoing programs.

Site Map. No Web site would be complete without a site map. This jump-point captures all content on the Web site and aids in rapid navigation. The site map enables you to find exactly what you are looking for in the least amount of time. The categories are consistent with the navigation button selections. Simply select your area of interest from the complete index.

“The Chem & Bio Archival...” cont.

The CBAIMS collection process

The CBAIMS collection process includes the following major components: collection identification, site characterization, preliminary document review and process decision, document processing, and customized activities.

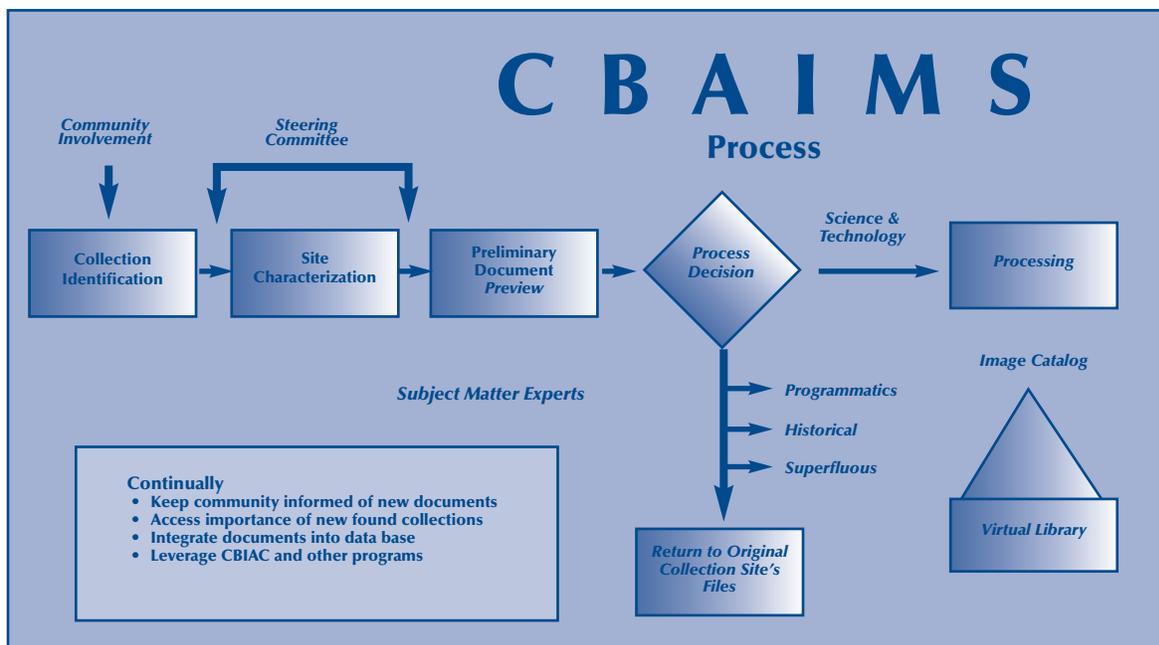
Collection Identification

Collection identification determines where significant documents may be located. This is the first step in the CBAIMS process.

The program manager and the CBIAC Steering Committee recommend sites based on their knowledge of the collections. Obvious sites include the U.S. Army Chemical School at Fort Leonard Wood, MO; the National Archives in College Park, MD; the West Desert Test Center (WDTC) at Dugway Proving Ground, UT; the U.S. Army Soldier and Biological Chemical Command (SBCCOM) at Edgewood, MD and Natick, MA; the Air Force Research Laboratory at Wright Patterson Air Force Base, OH; and Naval Surface Warfare Center at Dahlgren, VA. Other organizations and locations which are currently scheduled to be visited in the future include Fort Detrick, MD; the Defense Threat Reduction Agency; the National Ground Intelligence Center; the National Air Intelligence Center; the Naval Intelligence Agency; the Defense Intelligence Agency; the US Department of Agriculture; the US Department of Energy; the military archives at St Louis, MO; and continued work at the National Archives. As other major collections are identified, they will be added to this list. In addition, cooperative work is underway with selected CBD agencies in Canada and the United Kingdom.

Site Characterization

A site characterization visit is conducted at each site. An overall CBAIMS briefing is given to key leaders and managers, including an explanation of how the site's collection will be integrated into the overall CB information hierarchy. The purpose of the site characterization visit is to obtain detailed information on the number of documents or linear feet of documents in each collection, to identify whether documents are currently catalogued and how they are catalogued, to determine the number of classified and unclassified documents within each collection, to review whether documents have a valid distribution statement, to identify the number of documents already available in electronic form, and to ascertain any unique requirements for the holdings.



Preliminary Document Review and Process Decision

Initial on-site work analyzes the collection content and formats and determines the existence of duplicate data within the existing database. Highly qualified subject matter experts determine the relevance of documents in the collection. For instance, prior to the Army Chemical School moving from Fort McClellan, AL to Fort Leonard Wood, MO, former chemical officers and senior non-commissioned officers, based on their expertise and knowledge of the chemical and biological community and the individual collections at the Chemical School, were chosen to review documents. The Program Manager also established a Cooperative Research and Development Agreement task with the SBCCOM Technical Library to assist in the activities at Edgewood, MD. The subject matter experts determine whether documents are relevant for the CBAIMS collection based on the criteria outlined in the standard operating procedure augmented by their skills, knowledge and specialized backgrounds.

Processing

Once relevant documents are identified, the document information is added to the central database. The documents are catalogued and scanned in order to provide access to the entire CBD community.

Customized activities

Depending on funding arrangements with each site, customized arrangements ranging from delivery of a set of CDs containing electronic copies of the documents up to and including a dedicated classified server and scanning workstation coupled with an Oracle® database and customized database inquiry front end can be provided to the site.

In the News *cont.*

NSWC Dahlgren Dedicates New Chem-Bio Defense Facility
NSWC Dahlgren Public Affairs August 27, 2002
 "The Herbert H. Bateman Chemical Biological Defense Center, will plan and implement Navy survivability Research, Development, Testing and Evaluation (RDT&E) efforts against Chemical Biological Warfare threats. These RDT&E efforts are extended to the Operations Other Than War and Counterterrorism areas. As the Navy's lead laboratory for joint activities in all aspects of Chemical-Biological defense, NSWC Dahlgren provides the technology base, threat analysis and the full spectrum of engineering expertise necessary to design and develop the equipment needed to protect Naval and Joint Services afloat and ashore."
<http://www.news.navy.mil/local/navsea>

Old Shots Still Fight Smallpox
The News and Observer, Raleigh, NC August 29, 2002
 "Smallpox vaccines that routinely were given to babies in the United States until 1972 offer longer protection than scientists thought, with substantial immunity still evident as long as 35 years later, a researcher at UNC-Chapel Hill reports. The findings, published today in the New England Journal of Medicine, offer insight into the scope of the U.S. population's vulnerability to the virus, which public health officials warn could be used as a bioterrorism weapon. About 111 million Americans have been born since the national vaccination program ended in the belief that smallpox had been eradicated."
<http://www.newsobserver.com/front/story/1682729p-1702930c.html>

Vaccine Works Against Deadly Ricin Toxin • Fox, Maggie
REUTERS.COM September 4, 2002
 "A vaccine against ricin, one of the deadliest toxins known, works in mice and may work to protect people in case of a bioterrorist attack, U.S. researchers said on Wednesday. The researchers, at the University of Texas Southwestern Medical Center at Dallas, came up with the vaccine as part of their work using the potent toxin to fight cancer."
<http://www.reuters.com>

Also, See the September 2002 issue of SBCCOM's e-Catalyst for

- Field Hospitals Protected from Chemical Biological Threats
- Edgewood Center Tests Natural Decontaminants For Biological Threats
- Edgewood Center Evaluates Advanced Filtration Technology
- SBCCOM Natick Gears Up for the Future
- ...and more.

<http://www.sbccom.army.mil/hooah/200209/index.htm>

New Info. Resources *cont.*

and assess potential security threats, risks and vulnerabilities. The National Institute of Justice developed the vulnerability assessment methodology as a practical method to assess the security of chemical facilities within the United States. The vulnerability assessment methodology is designed to guide the chemical facility industry in making security improvements at chemical facilities." (Forward)

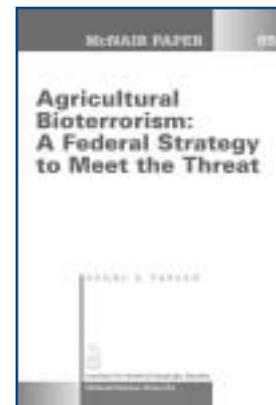


<http://www.ojp.usdoj.gov/nij/pubs-sum/195171.htm>

CB-160830 National Institute of Justice
 Office of Justice Programs U.S. Department of Justice
 810 Seventh Street, N.W. • Washington, D.C. 20531
 (202) 305-2065
<http://www.ojp.usdoj.gov/nij>

Parker, Henry S. **Agricultural Bioterrorism: A Federal Strategy to Meet the Threat.** Institute for National Strategic Studies. McNair Paper 65. Washington, D.C.: National Defense University, 2002.
<http://www.ndu.edu/inss/macnair/mcnair65/McN65.pdf>

"Because of its breadth, diversity, and unparalleled success, U.S. agriculture is an inviting target for terrorists. Not only are food supplies vital for feeding our own population and others around the world, and important for the Nation's economic health, but American agriculture is a vivid example of the capabilities of modern scientific farming. Intelligence reports indicate that a number of countries have active research programs that could produce biological agents to threaten crops and livestock." (Forward)



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 National Defense University • Washington, D.C. 20402
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“NBCCS...” cont.

Photo Gallery.

The Photo Gallery section is organized as a collection of images taken during materials testing, field investigations, and systems evaluations. The Photo Gallery provides a summary of images contained in the Materials Handbook – see the Handbooks section. The potential damaging effects of contaminants and decontaminants on materials are notably observable in these images. During the execution of a system’s program, it is hoped that the results of other materials tested will be added to this Photo Gallery. Some NBC defensive equipment is also provided. These images may aid you in selecting materials and equipment suitable for operations in an NBC environment. You are encouraged to contribute photographs and images from your programs.

Doctrinal Archive.

This is a collection of several outdated, digitized Army Field Manuals (the FM 3-X series). To ensure a state of readiness in NBC defense, a new set of publications is presently being written (the FM 3-11.X series) that supersedes the original FM 3-X series. The new FM 3-11.X series of publications encompasses international aspects and is being closely coordinated with NATO and other allied countries. In 1996, ARL(SLAD) created a computerized database of extracts taken from a portion of the FM 3-X series of publications and produced the NBC Toolbox, available both on CD-ROM and via the “world-wide web” (www). For historical purposes, a backup collection of the NBC Toolbox (extracts from FM 3-3, 3-4, 3-5, 3-6, and 3-9) is contained in these archives.

Conclusion. ARL(SLAD) has developed the NBCCS On-line Handbook using a networking approach needed to achieve survivability. Only those within the .mil or .gov domain have direct access to the secure Web site (<https://www-slad.arl.army.mil/Internal/NBCCS/home.html>). All other qualified users may apply for access to the NBCCS On-line Handbook by contacting Tim Mallory by phone (410.278.9733) or via email (tmallor@arl.army.mil) to obtain a user name and password assignment. Future plans under consideration include producing the compilation as a CD-ROM product, upgrading the Web site with a search-engine capability, and using the content to develop educational training manuals and workshop exercises, involving “distance learning,” or as a topic in a systems engineering course. Undoubtedly, NBCCS is an important element of a system’s survivability program. When judiciously applied across all DOD programs, NBCCS is a cost-effective approach to ensure that our 21st century soldiers finish their mission decisively.

About the Author: Mr. Timothy D. Mallory is the lead designer of the NBCCS On-Line Handbook and Webmaster for the Special Projects Team of ARL(SLAD). As an NBC Analyst, he holds a B.S. in mechanical engineering from the University of Maryland at College Park, and a Masters in engineering management from The George Washington University. With 15 years of service, he achieved U.S. Army Acquisition Corps, Level III Certification in Systems Planning Research, Development, and Engineering. Send comments or inquiries to tmallor@arl.army.mil.



“The Chem & Bio Archival...” cont.

Synergy – the relationship between CBAIMS and the CBIAC

The CBIAC serves as the DoD focal point for information related to CBD technology. The CBIAC generates, acquires, processes, analyzes, and disseminates CBD Science and Technology Information in support of Combatant Commanders, warfighters, Reserve Components, the CBD Research Development and Acquisition community, and federal, state, and local government agencies.

In addition to this support, the CBIAC also conducts Technical Area Tasks. One of these tasks is the Chemical and Biological Archival Information Management System. CBAIMS will enable the CBIAC to significantly improve its services to the CBD community.

The synergy between the CBIAC and CBAIMS will produce a range of benefits for the CBD community. It will enable the CBIAC to provide enhanced support to warfighters anywhere in the world. CBAIMS will also accelerate delivery of mission-critical resources throughout the CBD community. Because it will be a consolidated on-line repository for CBD information, CBAIMS will reduce the programmatic risk associated with CBD research and development efforts. CBAIMS will also reduce cost of research and development efforts by eliminating duplication of previous efforts, while reducing cost to maintain CBD information resources by ensuring that they are consolidated for ready access.

The existing CBIAC Web-based information system is being expanded by CBAIMS. The CBIAC database is being upgraded to support CBAIMS. Database and image servers containing electronic copies of CBAIMS are planned for high volume document distribution points determined by customer needs. The first such system is being implemented at Dugway Proving Ground, UT. To date, CBAIMS has brought over 50,000 citations and over 11,000 document images into the CBIAC, making them available to the CBD community.

Conclusion

CBAIMS will produce a wide range of benefits for the CBD community. It will enable the CBIAC to provide real time support to warfighters anywhere in the world. It will accelerate delivery of mission-critical resources throughout the CBD community. CBAIMS will reduce programmatic of CBD research and development efforts. Cost reductions will accrue by eliminating unnecessary duplication of previous efforts, reducing the need to maintain other CBD information resources, and consolidating these information resources for ready access. By providing a single focal point to search for CBD information, CBAIMS will improve delivery of mission critical CBD information products and services to warfighters, first responders and scientists and engineers.



INFORMATION ANALYSIS CENTER (IAC) AWARENESS CONFERENCE

November 12, 2002,
Cheyenne Mountain Resort,
Colorado Springs, CO

*DoD IACs: The Homeland Security
Community's Information Edge*



The conference is open to DoD and Federal Government Agencies. The conference objective is to explore strategic directions in Homeland Security (HLS) and resulting HLS scientific and technical information and support needs. Attendees will include policy makers, senior DoD and Federal leadership, program managers, scientists and engineers, and analysts.

For the conference agenda, administrative details, and registration information, go to the CBIAC home page at http://www.cbiac.apgea.army.mil/iac_conference/iac_aware.html, or contact Tim Dixon (410-569-0200, Dixon@battelle.org). For more information on DoD IACs, please see <http://iac.dtic.mil/>.

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